## Number Theory Assignments

1.1) $1,2,3,4,5,7,10,11,21,28$
-- End Assignment 1: Due Monday January $22^{\text {nd }}$ (Revisions due January $29^{\text {th }}$ ) --
1.2) $1,5,8,12,19,25,27$
1.3) $2,3,17$
1.4) $18,19,32$, find the largest Fibonacci number less than $1,000,000$
-- End Assignment 2: Due Monday January $29^{\text {th }}$ (Revisions due February $5^{\text {th }}$ ) --
1.5) $1,5,10,18,20$
2.1) $1,3,10$
2.2) 1, 3, 5, 9, 22
2.3) $1,2,3,4,6,9,11,15,20$, multiply two numbers of your choice using Karatsuba's method.
-- End Assignment 3: Due Monday February $5^{\text {th }}$ (Revisions due February $12^{\text {th }}$ ) --
3.1) $1,5,13,31$, find the $1,000,000^{\text {th }}$ prime number.
3.2) $2,6,14$
3.3) $3,4,5,6,7,17,24$
3.4) 1a, 2a, 3a, 4a, 19
-- End Assignment 4: Due Monday February $12^{\text {th }}$ (Revisions due February $19^{\text {th }}$ ) --
3.5) $1 a, 3,6,14_{\text {decimalPart }}$
3.6) 3ab, 15, 23
3.7) 1a, 1b, 11a
-- End Assignment 5: Due Monday February $19^{\text {th }}$ (Revisions due February $26^{\text {th }}$ ) --
4.1) $1 d, 5,12$
-- End Assignment 6: Due Monday February $26^{\text {th }}$ (Revisions due March $5^{\text {th }}$ ) --
4.2) $1 \mathrm{abc}, 3,8 \mathrm{ab}, 12,15$
4.3) $4,13,15$
-- End Assignment 6b: Due Monday March 5 ${ }^{\text {th }}$ (Revisions due March $12^{\text {th }}$ ) --
4.4) $1,7,11$
4.5) $1 \mathrm{c}, 3,7 b, 10 \mathrm{~b}$
-- End Assignment 7 -
4.6) 1ac, 2d, 3
6.1) $1,9,12,17$
-- End Assignment 8 -
6.2) $1,4,12,20$
6.3) $1 \mathrm{a}, 2,7,10$
7.1) 1aceg, 2e
-- End Assignment 9 (Due April 9 ${ }^{\text {th }}$ ) -
7.2) 1af, 7, 12
7.3) $3 \mathrm{a}, 5,9$
8.1) $1,3,10$
8.2) $1,5,13,34$
8.3) 1, 2, 5
-- End Assignment 10 (Due April 23 ${ }^{\text {rd }}$ ) -

